



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,204	07/11/2003	Michael Z. Eckblad	42P15062	4165
8791	7590	05/23/2005		
BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030				
			EXAMINER WRIGHT, INGRID D	
			ART UNIT 2835	PAPER NUMBER

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

8m

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/618,204	ECKBLAD ET AL.	
	Examiner	Art Unit	
	Ingrid Wright	2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 7-11-2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-23 is/are allowed.
- 6) ☒ Claim(s) 1-12 and 24-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7-11-2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

1. The independent claim 24 recites the following: "a method comprising," in the beginning of the claim. The claim should begin with, "method of" and indicate the type of method being disclosed.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The independent claim 1 recites the limitations, "third and fourth retention points of the actuator portions of the actuation lever" in the last line of the independent claim 1. There is insufficient antecedent basis for these citations in the claim.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2835

Claims 24-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoneyama et al (US PN 6449,154 B1).

Regarding the method claims 24-27, the method steps recited in the claims are inherently necessitated by the device structure as taught by Yoneyama et al. Yoneyama et al. disclosed (Fig. 1-3): pivot points (323) of a pair of actuator portions (322) of an actuation lever (32) of a rectangular frame of a spring cage (31) and a heat sink (2) within the rectangular frame of the spring cage (31), wherein two spring tabs (314) engage by corresponding spring portions the heat sink (2) and at least two hard tabs (313) attached to the rectangular frame of the spring cage (31) also engage the heat sink (2), wherein a rectangular frame of a retention module (33) is attached to a circuit board (5), wherein a combination of the actuation lever (32), spring cage (31) and heat sink (2) are attached to the rectangular frame of the retention module (33) to cause at least one retention point on the rectangular frame of the spring cage (31) to engage at least one corresponding retention point on the rectangular frame of the retention module (33), wherein actuation lever (32) is pivoted relative to the spring cage (31) to cause at least one retention point on an end of at least one of the pair of actuator portions (322) of the actuation lever (32) to engage at least one corresponding retention point on the rectangular frame of the retention module (33) and to cause a thermal conductive surface of the heat sink (2) to come into contact with a surface of a package

Art Unit: 2835

of and IC (4) attached to the circuit board (5), wherein the actuation lever(32) may be pivoted to a position where the actuation lever (32) is able to be latched to the spring cage (31) (See Fig. 3).

***Allowable Subject Matter***

4. Claims 13-23 are allowed.

Claim 1 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 2-12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 13-23, the independent claim 13 recites: "the first ends of both the first and second actuator portions are connected together by a lever portion" and "at least one latch tab is attached to the lever portion and is positioned to engage at least one corresponding latch tab attached to the rectangular frame of the spring cage." The aforementioned limitations in combination with all remaining limitations of claim 13 are

Art Unit: 2835

believed to render the claim 13 and all claims dependent therefrom patentable over the art of record.

Regarding claim 1-12, the independent claim 1 recites: "the first ends of both the first and second actuator portions are connected together by a lever portion." These limitations in combination with all remaining limitations of claim 1 are believed to render claim 1 and all claims dependent therefrom (claims 2-12) patentable over the art of record.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Winkel et al. (US PN 6496371 B2), Shia et al. (US PN 6522545 B2), Wong et al. (US PN 653213 B1), Chang (US PN 6450248 B1), Wong et al. (US PN 6243265 B1), Lauruhn et al. (US PN 6381836 B1), Shia et al. (US PN 6542367 B2), McHugh et al. (US PN 6648664 B1), Clemens et al (US PN 6082440), Wu (US PN 6400572 B1), McHugh et al. (US PN 6735085 B2), and Melberg et al. (US PN 6219239 B1) show the general state of the art regarding methods and modes of securing heat sinks.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ingrid Wright whose telephone number is (571) 272-8392. The examiner can normally be reached on M-F.

Art Unit: 2835

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IDW

A handwritten signature in black ink, appearing to read 'A. Vortman', with a stylized flourish at the end.

**ANATOLY VORTMAN**  
**PRIMARY EXAMINER**